

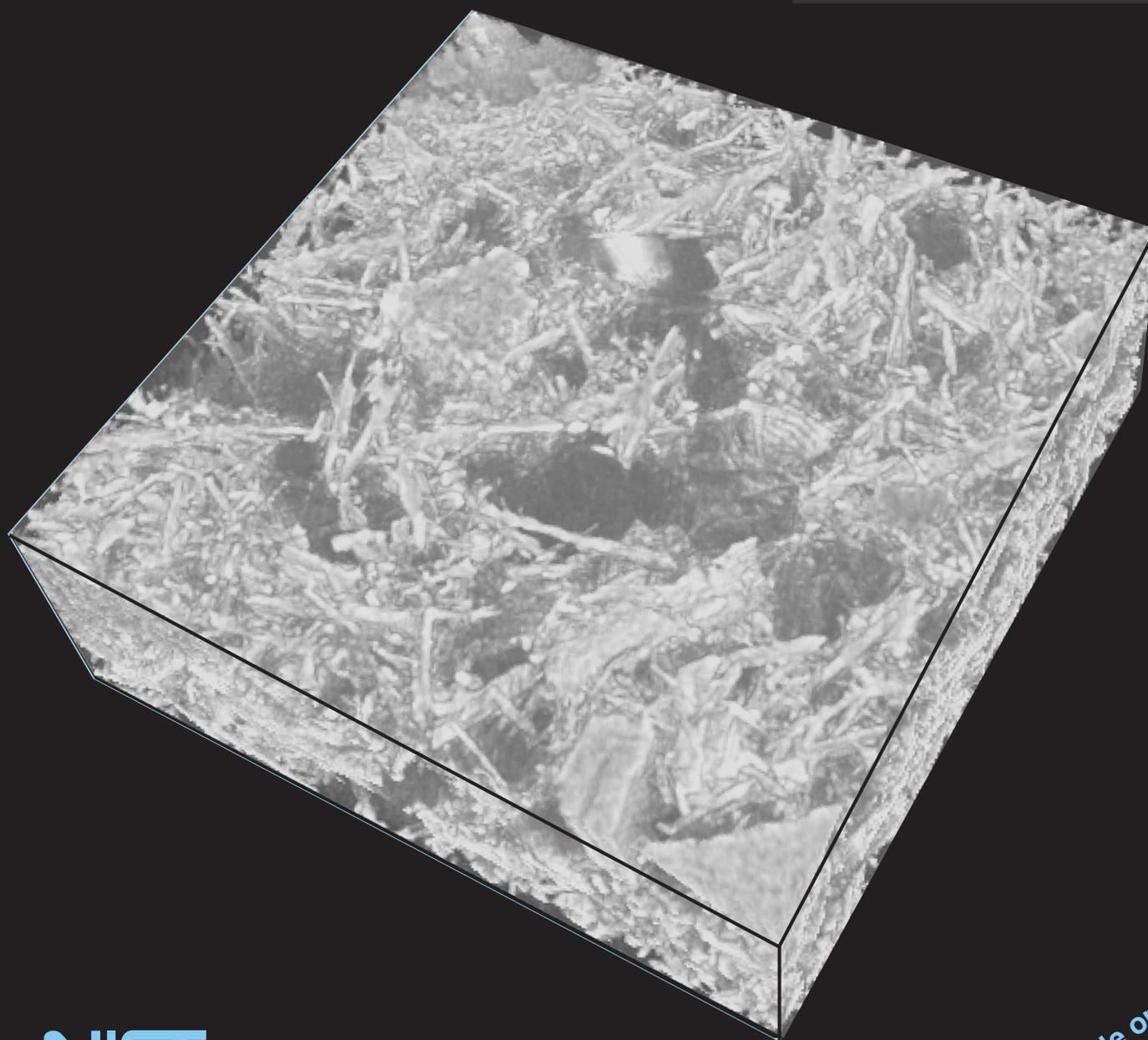
# Journal of Research

of the



# National Institute of Standards and Technology

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**NIST**

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<sup>1</sup>At Boulder, CO 80303.

<sup>2</sup>Some elements at Boulder, CO.

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**Cover:** 3-D microtomographic image of hydrating Plaster of Paris (water-to-solids mass ratio of 1.0, hydrated for 4 h) obtained at the European Synchrotron Radiation Facility in Grenoble, France in September 2000. A variety of needle-like and flat plate crystals of calcium sulfate dihydrate can be seen. See article p. 137 of this issue for a description of this technique. Shown microstructure is approximately  $285\ \mu\text{m} \times 285\ \mu\text{m} \times 95\ \mu\text{m}$ . Cover art arranged by C. Carey.

The *Journal of Research of the National Institute of Standards and Technology*, the flagship periodic publication of the national metrology institute of the United States, features advances in metrology and related fields of physical science, engineering, applied mathematics, statistics, biotechnology, and information technology that reflect the scientific and technical programs of the Institute. The *Journal* publishes papers on instrumentation for making accurate measurements, mathematical models of physical phenomena, including computational models, critical data, calibration techniques, well-characterized reference materials, and quality assurance programs that report the results of current NIST work in these areas. Occasionally, a Special Issue of the *Journal* is devoted to papers on a single topic. Also appearing on occasion are review articles and reports on conferences and workshops sponsored in whole or in part by NIST.

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